

## INTER-OBSERVER VARIABILITY IN SIMPLE CYSTOMETRY COMPARED WITH VIDEO CYSTOMETRY INTERPRETATION: THE INFLUENCE ON FURTHER MANAGEMENT

### Hypothesis / aims of study

To assess the inter-observer variation in interpreting simple cystometry (CMG) and video cystometry (VCMG) in patients with complex lower urinary tract dysfunction, and assess the impact of analysis on further management.

### Study design, materials and methods

Fifty-four consecutive patients with complex obstructive (n=10), incontinence (n=20) or neuropathic (n=24) lower urinary tract dysfunction, underwent VCMG study and subsequent management. The histories, tracings and video images were reviewed by three reconstructive urologists blinded to the patients' original outcomes; and their diagnoses, interpretation and suggested managements recorded. The variation in opinion was analysed.

### Results

Diagnostic agreement between the three consultants occurred in 30% of CMG and 60% of VCMG. Even in cases where there was diagnostic agreement, definitive management was consistent in only 30% of cases. In 40% of cases there was a difference between two alternative options, and in 30% of cases the three consultants all had differing opinions. In 44% of cases the suggested management contradicted the actual management instigated. CMG agreement was best for bladder outflow obstruction (75%), and was not improved by VCMG (70%,  $p=0.52$ ). Correlation was worst for those with incontinence and neuropathic dysfunction. In these cases the correlation between management was only 30% and 25% with CMG, but increased to 60% ( $p=0.04$ ) and 70% ( $p=0.02$ ) respectively using VCMG.

### Interpretation of results

There is considerable variability in CMG and VCMG interpretation even in specialist hands. Consistency doubled using VCMG for patients with incontinence or neuropathic dysfunction, but not outflow obstruction. Decision making varied according to this interpretation.

### Concluding message

These results emphasize the importance of multidisciplinary review of urodynamics and management in complex reconstructive cases.

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<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>None</b>